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2082984

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CH2MHILL

July 19, 2004

Ms. Paula Bisson
United States Environmental Protection Agency
75 Hawthorne Street, CMD-4-2
San Francisco, CA 94105

Subject: Notification Regarding Self-implementing On-site Cleanup and Disposal of Polychlorinated Biphenyl Remediation Waste at Building 84A Within Investigation Area D1, Eastern Early Transfer Parcel, Mare Island, Vallejo, California

Dear Ms. Bisson:

CH2M HILL prepared this letter in compliance with the Consent Agreement and Final Order (CA/FO) between United States Environmental Protection Agency (USEPA) and the United States Department of the Navy (Navy), with the City of Vallejo and Lennar Mare Island (LMI) as intervenors (USEPA et al. 2001). The CA/FO sets forth the polychlorinated biphenyl (PCB)-related requirements that must be met to satisfy the Toxic Substances Control Act (TSCA) for the Eastern Early Transfer Parcel (EETP) of Mare Island. The purpose of this letter is to present the proposed cleanup activities for a stain-specific location on the floor of Building 84A.

From visual site surveys, as well as review of historical records, building closure reports, and databases of electrical equipment, the Navy identified PCB sites where PCB-containing equipment was located, where PCB spills were documented, or where contamination was suspected because of building history or visible stains (TtEMI 1998). Navy personnel from Supervisor of Shipbuilding, Conversion and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS) personnel conducted interim PCB assessments and performed cleanup actions (i.e., washing, scabbling, excavation) in accordance with Technical Work Documents, where necessary. Following the SSPORTS interim PCB assessments and any necessary cleanup actions, confirmation samples were collected by Tetra Tech Environmental Management, Inc. (TtEMI) personnel either to confirm SSPORTS findings that no cleanup was necessary or to determine the effectiveness of the SSPORTS cleanup actions.

Based on review of historical records and analytical results for additional sampling, one PCB site has been identified at Building 84A, located in Investigation Area (IA) D1. PCB site Building 84A Unknown Location 01 (UL#01) is a stain-specific location on the concrete/tile floor inside of Building 84A.

In accordance with the provisions of TSCA, and as stated in 40 CFR 761.61(a)(3), Notification is required at least 30 days prior to the start of the cleanup action at a PCB site. The purpose of this letter is to provide this required Notification for site cleanup at PCB site Building 84A UL#01. The cleanup at this site will be in accordance with 40 CFR 761.61(a)—self-implementing, on-site cleanup and disposal of PCB remediation waste. This Notification includes the nature, location,

and extent of contamination, summary of previous sampling, the proposed cleanup plan, and a certification that all sampling plans and sampling analysis procedures used to characterize this site is on file and available for USEPA inspection.

Nature of Contamination ~ 40 CFR 761.61(a)(3)(i)(A)

Figure 1 presents the sampling locations and analytical results at Building 84A UL#01. Building 84A is located adjacent to the west side of Building 84, on Petaluma Avenue, within IA D1 (Figure 1). The building was constructed in 1939 and was used as a warehouse and print shop (SSPORTS 1997). This building is currently vacant and is located in a proposed residential land-use area (LMI 2000).

PCB site Building 84A UL#01 is a stain-specific location on the concrete/tile floor inside the central portion of Building 84A. The source of the stain is unknown. Attachment A contains a photo of this stain. A concrete floor sample at this stain-specific location had a PCB concentration of 1.72 milligrams per kilogram (mg/kg). Only one of the floor samples inside Building 84A had a PCB concentration greater than the 1 mg/kg TSCA cleanup level.

Sampling Procedures and Results ~ 40 CFR 761.61(a)(3)(i)(B)

Table 1 provides a summary of the previous sampling at Building 84A UL#01. This table includes the sample numbers, matrix, sample dates, and total PCB concentrations (laboratory reporting limit is provided when PCBs were not detected). All samples were analyzed for PCBs using USEPA Methods SW8080, SW8081, or SW8082. Attachment B contains the analytical laboratory data sheets from the sampling events at this site.

In February 1995, SSPORTS personnel collected three samples from concrete, five samples from tile, and one metal sample from Building 84A, as shown in Table 1. These samples were a combination of solid and wipe samples. Data from two of the three concrete samples are missing, and the PCB concentrations for those samples are unknown. The PCB concentration in the third concrete sample was 0.73 micrograms per 100 square centimeters. PCBs were not detected in the tile samples above the laboratory reporting limits, and PCBs were detected in the metal sample at a concentration of 1.12 mg/kg, as shown in Table 1.

As there were no analytical data reports available in the Navy files to confirm some of these sample results, CH2M HILL performed additional sampling and laboratory analysis in April 2004 to replace the missing sample results for the two concrete samples. In April 2004, CH2M HILL collected two concrete samples from approximately the same locations as the previous two concrete samples with missing data. PCB concentrations in these two samples were 0.867 mg/kg and 1.72 mg/kg, respectively, as shown in Table 1. In addition, CH2M HILL collected one metal wipe sample from the approximate location of the previous metal sample, as the units of the previous results (mg/kg) did not correspond with the media (i.e., PCB samples for metals are usually collected as wipe samples). During an April 2004 site visit, there was no visible

evidence that SSPORTS collected solid samples from the metal. PCBs were not detected above the laboratory reporting limit in the CH2M HILL metal wipe sample, as shown in Table 1.

Location and Extent of Contaminated Area ~ 40 CFR 761.61(a)(3)(i)(C)

PCBs were detected at concentrations exceeding 1 mg/kg (the cleanup goal for bulk PCB remediation waste in high-occupancy areas as cited in the TSCA regulations 40 CFR 761.61(a)(4)(i)(A)) in the central portion of the concrete floor at one stain-specific location (sample B84A-0073-C0 with a result of 1.72 mg/kg) inside Building 84A. An adjacent sample location (sample B84A-0072-C0) had a PCB concentration of 0.867 mg/kg.

PCBs were detected in a metal sample collected by SSPORTS in 1995 at a concentration of 1.12 mg/kg (the sample was collected from a windowsill). However, the units of the results (mg/kg) did not correspond with the media (i.e., PCB samples for metals are usually collected as wipe samples). PCBs were not detected in a metal wipe sample collected by CH2M HILL in 2004 (the sample was collected in approximately the same location as the sample containing 1.12 mg/kg based on a sample identification label present at the site). PCBs were not detected in tile samples collected from Building 84A.

Cleanup Plan ~ 40 CFR 761.61(a)(3)(i)(D)

The cleanup plan for Building 84A UL#01 involves removing the PCB-impacted floor around sample location B84A-0073-C0 (1.72 mg/kg), as shown in Figure 1. The cleanup action area will also include the adjacent sample location B84A-0072-C0 (0.867 mg/kg). The area of concrete to be removed is approximately 1.5 feet by 10 feet and approximately 6 inches deep. The cleanup goal for concrete is to achieve a maximum PCB concentration equal to or less than 1 mg/kg—the TSCA cleanup goal for bulk PCB remediation waste in high-occupancy areas. If soil is encountered during this floor removal, then the cleanup goal will be the USEPA residential preliminary remediation goal for soil (0.22 mg/kg).

The removed concrete will be loaded directly into containers to await sampling for waste characterization purposes. Because the maximum concentration of PCBs in samples collected from Building 84A UL#01 is 1.72 mg/kg, it is estimated that the removed floor material will be disposed of in an approved an regulated Class II landfill.

Following the removal of the PCB-impacted floor, verification concrete chip samples will be collected from the removal area in accordance with the requirements of the regulatory agencies. Three concrete chip verification samples will be collected from the bottom of the floor removal area, based on a grid, and one additional sample will be collected for quality assurance/quality control purposes. All samples will be submitted for PCBs analysis (USEPA Method SW8082). Samples will be submitted to a California-certified analytical laboratory in accordance with the *Final Quality Assurance Project Plan* (CH2M HILL 2001). If necessary, based on the evaluation of the analytical results, CH2M HILL will continue floor removal until the cleanup goal has been achieved.

Following receipt of the analytical data for verification samples and confirmation that the cleanup goals are met, the removed floor will be replaced with new concrete.

Removal and sampling activities at Building 84A UL#01 will be performed in accordance with the regulatory agency-approved *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003). Site activities will be performed in accordance with the *Health and Safety Plan for PCB Site Sampling and Remediation* (CH2M HILL 2002), which is documented in the regulatory agency-approved *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003).

Summary

This cleanup action will be performed in accordance with the *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003) and 40 CFR 761. Sample analysis will be in accordance with the *Final Quality Assurance Project Plan* (CH2M HILL 2001) using USEPA Method SW8082. Health and safety will be in accordance with the *Health and Safety Plan for PCB Site Sampling and Remediation* (Appendix A in the *Draft Polychlorinated Biphenyl Work Plan* (CH2M HILL 2002)). Standard operating procedures (SOPs) for the field work and issues regarding site security, site access, permits and notifications, site restoration, and site demobilization were addressed in the *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003).

Waste containing PCBs generated from the cleanup will be disposed of off site. PCB waste management will be performed in accordance with CH2M HILL SOP Health, Safety, and the Environment Number 82 (HSE-82). This SOP was provided in Appendix B8 of the *Draft Polychlorinated Biphenyl Work Plan* (CH2M HILL 2002).

The cleanup actions at Building 84A UL#01 are scheduled to occur during September 2004. In accordance with TSCA regulations, the cleanup goal for this floor at Building 84A UL#01 is to achieve PCB concentrations equal to or less than 1 mg/kg.

A summary report will be submitted after the cleanup action at Building 84A UL#01 has been performed. The report will contain a summary of the field activities and evaluate the analytical data from the verification sampling activities

Certification ~ 40 CFR 761.61(a)(3)(i)(E)

Project files for Building 84A UL#01 are located in the CH2M HILL Office in Oakland, California. This office is located at 155 Grand Avenue, Suite 1000. Attachment C contains the written certification, signed by LMI (the owner of the property where the cleanup site is located) and CH2M HILL (the party conducting the cleanup), documenting that all sampling plans and procedures used to assess or characterize the PCB contamination at the cleanup site are on file at the above-mentioned location and available for USEPA inspection.

Please submit your approval of the self-implementing cleanup at Building 84A to me at the above address or via e-mail at jmorris1@CH2M.com within 30 calendar days of receiving this

Notification. If you have any questions regarding Building 84A UL#01, please contact Carla Duncan at 775/329-7238, extension 220.

References

CH2M HILL. 2001. *Final Quality Assurance Project Plan*. November.

_____. 2002. *Draft Polychlorinated Biphenyl Work Plan*. August 6.

_____. 2003. *Final Polychlorinated Biphenyl Work Plan*. March 7.

Lennar Mare Island (LMI). 2000. *Preliminary Land Use Plan*. May 23.

Supervisor of Shipbuilding, Conversion, and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS). 1997. *Basewide Environmental Baseline Survey Former Mare Island Naval Shipyard, Supplement for Zone 08*. Draft. June 21.

United States Environmental Protection Agency, United States Department of the Navy, the City of Vallejo, and Lennar Mare Island. 2001. *Complaint/Consent Agreement and Final Order between Lennar Mare Island, the City of Vallejo, the U.S. Department of the Navy, and the U.S. Environmental Protection Agency Region IX*. EPA Docket No. TSCA-9-2002-0002. December 20.

Sincerely,

CH2M HILL

Jeffery C. Morris, PE

Enclosures:
Figure 1 – Soil Sampling Locations and Proposed Excavation Area at Building 84A UL#01
Table 1 - Previous Sample Results, Building 84A UL#01
Attachment A – Photo of Building 84A UL#01
Attachment B – Analytical Data Sheets
Attachment C – Certification

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CH2M HILL
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Sacramento, CA 95833-2937

TABLE 1
Sample Results for Building 84A UL#01
PCB Sites Building 84A, Investigation Area D1, Mare Island, Vallejo, California

PCB Site Name	Site Description	Sample Number	Sample Matrix	Sample Date	PCB Concentration	Comments
Building 84A UL#01	Building floor	4357-0070	Tile	02/1995	ND (<0.1 µg/100 cm²)	
		4357-0071	Concrete	02/1995	Unknown	
		4357-0072	Concrete	02/1995	Unknown	
		4357-0073	Metal	02/1995	1.12 mg/kg	Result in mg/kg units does not match media and observations during April 2004 site visit
		4357-0064	Tile	02/1995	ND (<0.1 µg/100 cm²)	
		4357-0065	Concrete	02/1995	0.73 µg/100 cm²	
		4357-0067	Tile	02/1995	ND (<0.1 µg/100 cm²)	
		4357-0068	Tile	02/1995	ND (< 0.1 mg/kg)	Result in mg/kg units does not match media and observations during April 2004 site visit
		4357-0069	Tile	02/1995	ND (<0.1 µg/100 cm²)	
		B84A-0072-C0	Concrete	04/2004	0.867 mg/kg	Resample of location 4357-0071
		B84A-0073-C0	Concrete	04/2004	1.72 mg/kg	Resample of location 4357-0072
		B84A-0074-W0	Metal	04/2004	ND (<0.33 µg/100 cm²)	Resample of location 4357-0073

Notes:
UL = Unknown Location.
mg/kg = milligrams per kilogram.
µg/100cm^2 = micrograms per 100 square centimeters.
ND = not detected (laboratory reporting limit in parenthesis).

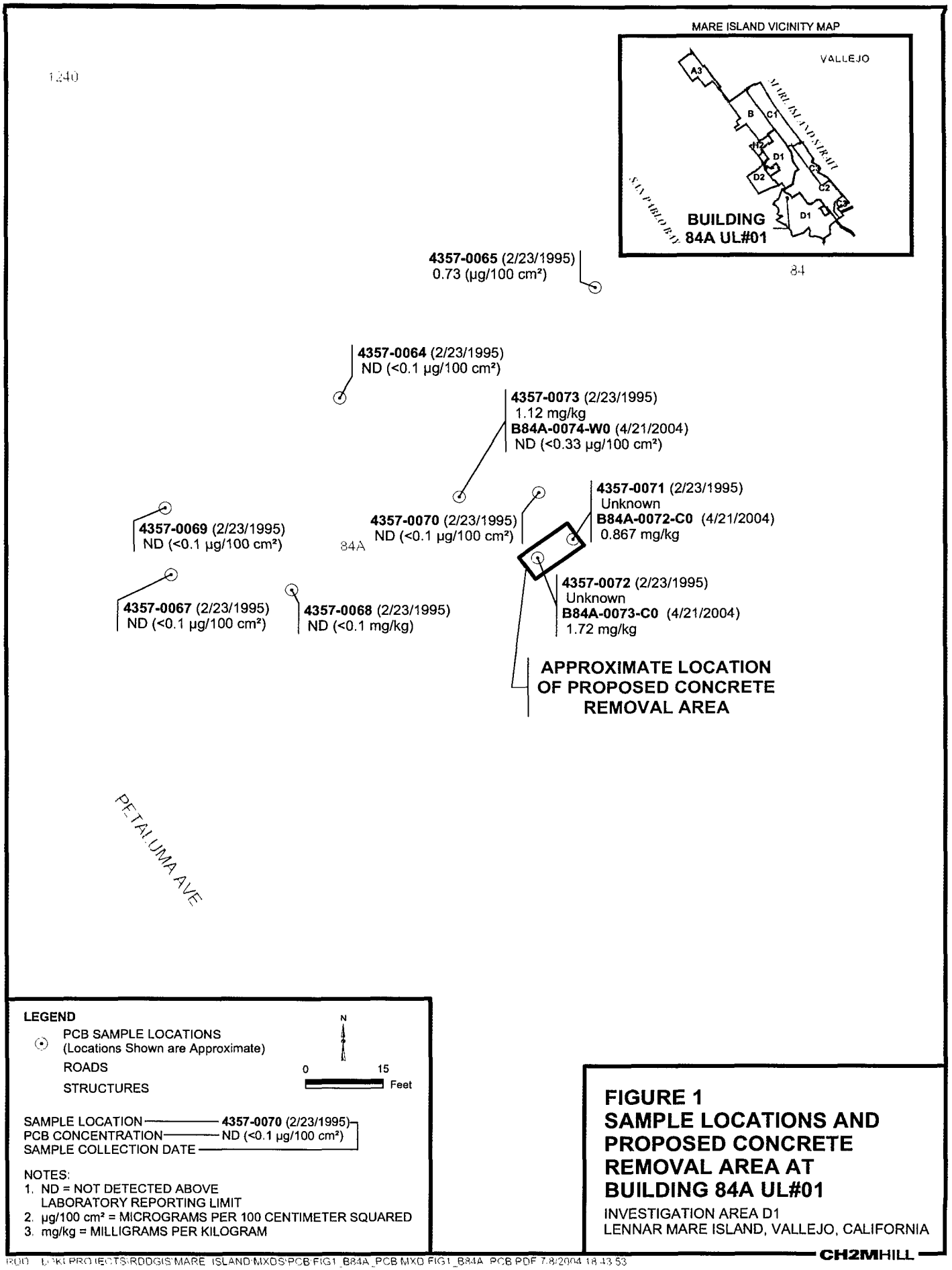

FIGURE 1
SAMPLE LOCATIONS AND PROPOSED CONCRETE REMOVAL AREA AT BUILDING 84A UL#01
INVESTIGATION AREA D1
LENNAR MARE ISLAND, VALLEJO, CALIFORNIA

CH2MHILL

Attachment A - Photo of Building 84A UL#01

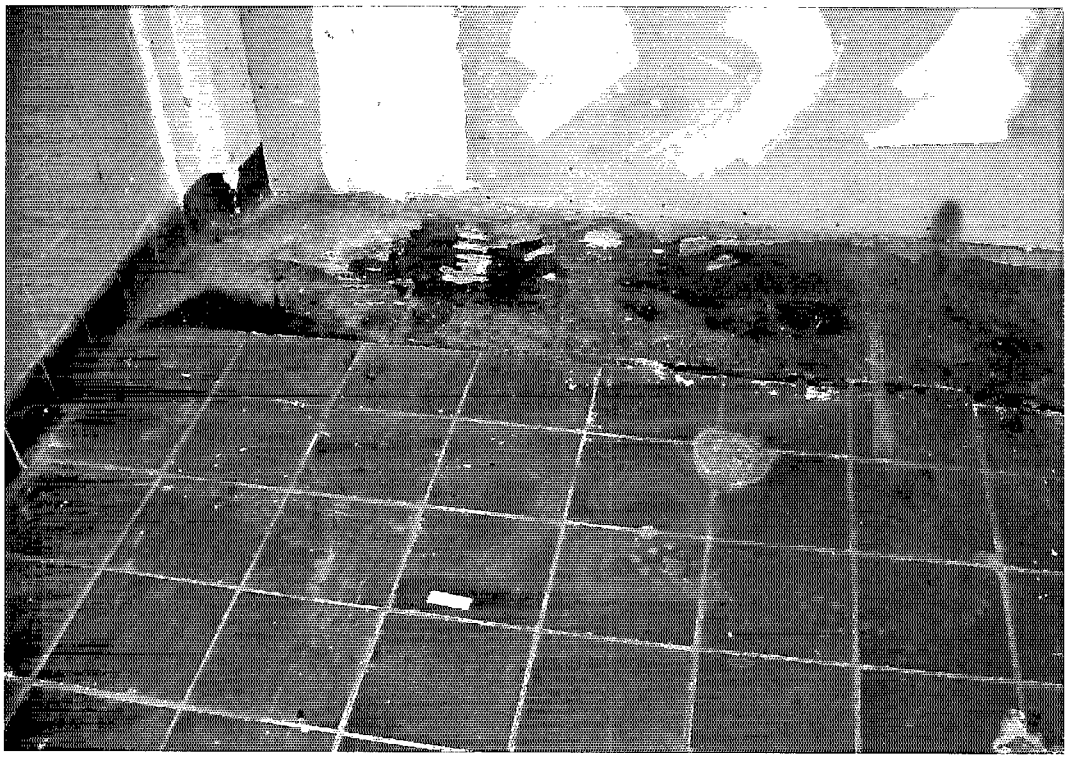

Photo 1. Sample location B84A-0072-C0

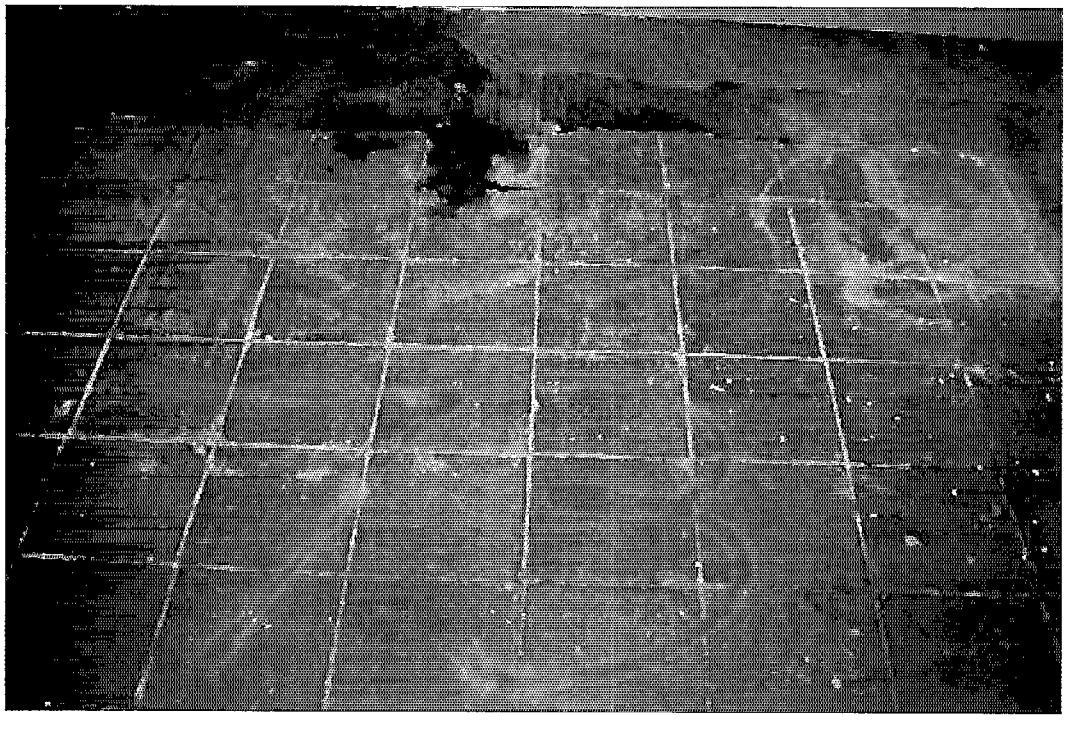

Photo 2. Sample location B84A-0073-C0

Attachment B – Analytical Data Sheets

CHAIN OF CUSTODY RECORD dtd 02/23/95 K533 Doc Num 50540203 Page 2 of 3

ADDRESS BLOCK

From	To
Tammi Kratzel MINSY Code 106.14 Stop T56 Bldg 1345 Vallejo, CA 94592-5100 Tel (707) 646-0181 Fax (707) 646-0184	Cal Science Environmental Laboratories, Inc. 11631 Seaboard Circle Stanton, CA 90680 Tel (714) 895-5494 Fax (714) 894-7501

INSTRUCTION BLOCK

Turnaround Time: [ ] Same Day [ ] 24 Hrs [ ] 48 Hrs [ ] 5 Days ~~[X] 10 Days~~ [X] Rush

Written QC Report Required? [X] Routine QC [ ] RWQCB

PCB SAMPLE DATA BLOCK

C106.14 Sample Number	C106.4 Sample ID	Location/Description	Sampling Date	Sampling Time	Oil Grab	Water Grab	Solid/Soil Filter	Type	Num Cont	Cont Size	Analysis Required
2379-95	4357-0056	84/oil stain #	02/23/95	10:23	[ ]	[ ]	[X]	[2]	[1]	[40ml]	3001AP
2380-95	4357-0057	84/oil stain #	02/23/95	10:27	[ ]	[ ]	[X]	[2]	[1]	[40ml]	3001AP
2381-95	4357-0058	84/oil stain #	02/23/95	10:31	[ ]	[ ]	[X]	[2]	[1]	[40ml]	3001AP
2382-95	4357-0059	84/oil stain #	02/23/95	10:34	[ ]	[ ]	[X]	[2]	[1]	[40ml]	3001AP
2383-95	4357-0060	84/oil stain #	02/23/95	10:38	[ ]	[ ]	[X]	[2]	[1]	[40ml]	3001AP
2384-95	4357-0061	84/oil stain #	02/23/95	10:44	[ ]	[ ]	[X]	[2]	[1]	[40ml]	3001AP
2385-95	4357-0062	84/oil stain #	02/23/95	10:50	[ ]	[ ]	[X]	[4]	[1]	[40ml]	3001AP
2386-95	4357-0063	84/oil stain #	02/23/95	10:57	[ ]	[ ]	[X]	[4]	[1]	[40ml]	3001AP
2387-95	4357-0064	84/oil stain #	02/23/95	12:55	[ ]	[ ]	[X]	[2]	[1]	[40ml]	3001AP
2388-95	4357-0065	84/oil stain #	02/23/95	12:59	[ ]	[ ]	[X]	[2]	[1]	[40ml]	3001AP

Type: [1] swipe mm ext, [2] swipe spill, [3] swipe resv int, [4] solid spill, [5] oil res mm, [6] water grab, [7] blank

CHAIN OF CUSTODY RECORD

Data Transferred by: (Signature)		Date: 2-27-95	Time: 1530
Relinquished by: (Signature)	Received by: (Signature)	Date: 2-27-95	Time: 1530
Relinquished by: (Signature)	Received by: (Signature)	Date: 2/24/95	Time: 1010
Relinquished by: (Signature)	Received by: (Signature)	Date: 2-27-95	Time: 1452
Relinquished by: (Signature)	Received for Laboratory: (Signature)	Date:	Time:

Feb 27 5

CHAIN OF CUSTODY RECORD dtd 02/23/95 K533 Doc Num 50540203 Page 3 of 3

ADDRESS BLOCK

From	To
Tammi Kratzel MINSY Code 106.14 Stop T56 Bldg 1345 Vallejo, CA 94592-5100 Tel (707) 646-0181 Fax (707) 646-0184	Cal Science Environmental Laboratories, Inc. 11631 Seaboard Circle Stanton, CA 90680 Tel (714) 895-5494 Fax (714) 894-7501

INSTRUCTION BLOCK

Turnaround Time: Written QC Report Required?

[ ] Same Day [ ] 24 Hrs [ ] 48 Hrs [ ] 5 Days ~~[X] 10 Days~~ [X] Rush [X] Routine QC [ ] RWQCB

PCB SAMPLE DATA BLOCK

C106.14 Sample Number	C106.4 Sample ID	Location/Description	Sampling Date	Time	Oil Grab	Water Grab	Solid/Soil Filter	Type	Num Cont	Cont Size	Analysis Required
2389-95	4357-0066	84/oil stain #	02/23/95	13:04	[ ]	[ ]	[X]	[4]	[1]	[40ml]	300/TAP
2390-95	4357-0067	84/oil stain #	02/23/95	13:10	[ ]	[ ]	[X]	[2]	[1]	[40ml]	300/TAP
2391-95	4357-0068	84/oil stain #	02/23/95	13:14	[ ]	[ ]	[X]	[4]	[1]	[40ml]	300/TAP
2392-95	4357-0069	84/oil stain #	02/23/95	13:21	[ ]	[ ]	[X]	[2]	[1]	[40ml]	300/TAP
2393-95	4357-0070	84/oil stain #	02/23/95	13:28	[ ]	[ ]	[X]	[2]	[1]	[40ml]	300/TAP

Type: [1] swipe mm ext, [2] swipe spill, [3] swipe resv int, [4] solid spill, [5] oil res mm, [6] water grab, [7] blank

CHAIN OF CUSTODY RECORD

Data Transferred by: (Signature)		Date: 2-23-95	Time: 1530
Relinquished by: (Signature)	Received by: (Signature)	Date: 2-23-95	Time: 1530
Relinquished by: (Signature)	Received by: (Signature)	Date: 2-24-95	Time: 1015
Relinquished by: (Signature)	Received by: (Signature)	Date: 2-27-95	Time: 1452
Relinquished by: (Signature)	Received for Laboratory: (Signature)	Date:	Time:

Feb275

Calscience
Environmental
Laboratories, Inc.

ANALYTICAL REPORT

Mare Island Naval Shipyard		Date Sampled:	02/23/95
Code 106.14, Stop T-56		Date Received:	02/28/95
Building 1345		Date Extracted:	02/28/95
Vallejo, CA 94592-5100		Date Analyzed:	03/01/95
		Work Order No.:	95-02-430
Attn: Tammi Kratzel		Method:	EPA 8080 (PCBs)
RE: Contract No. N00123-92-D-4011		Page 8 of 9	

All results are reported in µg/sample.

Sample Number: 2387-95 (84/oil stain #)

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Sample Number: 2388-95 (84/oil stain #)

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	0.73	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Calscience
Environmental
Laboratories, Inc.

ANALYTICAL REPORT

Mare Island Naval Shipyard	Date Sampled:	02/23/95
Code 106.14, Stop T-56	Date Received:	02/28/95
Building 1345	Date Extracted:	02/28/95
Vallejo, CA 94592-5100	Date Analyzed:	03/01/95
	Work Order No.:	95-02-430
Attn: Tammi Kratzel	Method:	EPA 8080 (PCBs)
RE: Contract No. N00123-92-D-4011	Page 1 of 2	

All results are reported in µg/sample.

Sample Number: 2390-95 (84/oil stain #)

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Sample Number: 2392-95 (84/oil stain #)

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

Date Sampled: 02/23/95
Date Received: 02/28/95
Date Extracted: 02/28/95
Date Analyzed: 03/01/95
Work Order No.: 95-02-430
Method: EPA 8080 (PCBs)

All concentrations are reported in µg/kg (ppb).

Sample Number: 2389-95 (84/oil stain #)

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	100
Aroclor-1221	ND	100
Aroclor-1232	ND	100
Aroclor-1242	ND	100
Aroclor-1248	ND	100
Aroclor-1254	970	100
Aroclor-1260	ND	100
Aroclor-1262	ND	100

Sample Number: 2391-95 (84/oil stain #)

Aroclor-1016	ND	100
Aroclor-1221	ND	100
Aroclor-1232	ND	100
Aroclor-1242	ND	100
Aroclor-1248	ND	100
Aroclor-1254	ND	100
Aroclor-1260	ND	100
Aroclor-1262	ND	100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Mare Island Naval Shipyard		Date Sampled:	02/23/95
Code 106.14, Stop T-56		Date Received:	02/28/95
Building 1345		Date Extracted:	02/28/95
Vallejo, CA 94592-5100		Date Analyzed:	03/01/95
		Work Order No.:	95-02-430
Attn: Tammi Kratzel		Method:	EPA 8080 (PCBs)
RE: Contract No. N00123-92-D-4011		Page 2 of 2	

All results are reported in µg/sample.

Sample Number: 2393-95 (84/oil stain #)

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Sample Number: Method Blank

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Reviewed and Approved _____ on 03/02/1995

William H. Christensen
Deliverables Manager

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Waypoint

Caiscience
Environmental
Laboratories, Inc.

ANALYTICAL REPORT

Mare Island Naval Shipyard	Date Sampled:	02/23/95
Code 106.14, Stop T-56	Date Received:	02/28/95
Building 1345	Date Extracted:	02/28/95
Vallejo, CA 94592-5100	Date Analyzed:	03/01/95
	Work Order No.:	95-02-431
Attn: Tammi Kratzel	Method:	EPA 8080 (PCBs)
RE: Contract No. N00123-92-D-4011	Page 1 of 1	

All concentrations are reported in µg/kg (ppb).

Sample Number: 2394-95(84A/oil stain #)

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	100
Aroclor-1221	ND	100
Aroclor-1232	ND	100
Aroclor-1242	1120	100
Aroclor-1248	ND	100
Aroclor-1254	ND	100
Aroclor-1260	ND	100
Aroclor-1262	ND	100

Sample Number: Method Blank

Aroclor-1016	ND	100
Aroclor-1221	ND	100
Aroclor-1232	ND	100
Aroclor-1242	ND	100
Aroclor-1248	ND	100
Aroclor-1254	ND	100
Aroclor-1260	ND	100
Aroclor-1262	ND	100

Reviewed and Approved _____ on 03/02/1995
William H. Christensen
Deliverables Manager

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

1A

ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **B84A-0072-C0**

Lab Name: CH2M HILL/LAB/CVO Contract #: 920594.OTC

Lab Code: CVO Case No.: D3240 SAS No.: D3240 SDG No.: D3240

Matrix: SOIL Lab Sample ID: **D324001**

Sample Amt.: 10.9 g Lab File ID: 094F3801.D

% Moisture: 2 Decanted: Y Date Received: 04/22/04

Extraction: Sonc Date Extracted: 04/26/04

Extract Vol.: 5 ml Date Analyzed: 05/08/04

Injection Vol.: 3.0 ul Dilution Factor: 10

GPC Cleanup: N Sulfur Cleanup: Y

Concentration Units: ug/Kg

CAS #	Analyte	MDL	PQL	Result	Confirm	Q
12674-11-2	PCB-1016	21.4	308	308		U
11104-28-2	PCB-1221	89.0	308	308		U
11141-16-5	PCB-1232	58.7	308	308		U
53469-21-9	PCB-1242	36.8	308	867	958	
12672-29-6	PCB-1248	43.8	308	308		U
11097-69-1	PCB-1254	22.8	308	308		U
11096-82-5	PCB-1260	22.8	308	308		U

Surrogate	% Rec.	QC Limits	Qualifier
Decachlorobiphenyl	214	25-143	*

Comments:

1A

ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **B84A-0073-C0**

Lab Name: CH2M HILL/LAB/CVO Contract #: 920594.OTC

Lab Code: CVO Case No.: D3240 SAS No.: D3240 SDG No.: D3240

Matrix: SOIL Lab Sample ID: **D324002**

Sample Amt.: 12.1 g Lab File ID: 095F3901.D

% Moisture: 2 Decanted: Y Date Received: 04/22/04

Extraction: Sonc Date Extracted: 04/26/04

Extract Vol.: 5 ml Date Analyzed: 05/08/04

Injection Vol.: 3.0 ul Dilution Factor: 20

GPC Cleanup: N Sulfur Cleanup: Y

Concentration Units: ug/Kg

CAS #	Analyte	MDL	PQL	Result	Confirm	Q
12674-11-2	PCB-1016	38.7	555	555		U
11104-28-2	PCB-1221	161	555	555		U
11141-16-5	PCB-1232	106	555	555		U
53469-21-9	PCB-1242	66.4	555	1720	1670	
12672-29-6	PCB-1248	79.0	555	555		U
11097-69-1	PCB-1254	41.2	555	555		U
11096-82-5	PCB-1260	41.2	555	555		U

Surrogate	% Rec.	QC Limits	Qualifier
Decachlorobiphenyl	*	25-143	

Comments:

* Sample diluted beyond the calibrated range of the surrogate spike

1A

ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **B84A-0074-W0**

Lab Name: CH2M HILL/LAB/CVO Contract #: 920594.OTC

Lab Code: CVO Case No.: D3240 SAS No.: D3240 SDG No.: D3240

Matrix: Wipe Lab Sample ID: **D324003**

Sample Amt.: 1 Wipe Lab File ID: 042F4301.D

% Moisture: 0 Decanted: N/A Date Received: 04/22/04

Extraction: Sonc Date Extracted: 04/27/04

Extract Vol.: 5 ml Date Analyzed: 04/28/04

Injection Vol.: 3.0 ul Dilution Factor: 1

GPC Cleanup: N Sulfur Cleanup: N

Concentration Units: ug/Wipe

CAS #	Analyte	MDL	PQL	Result	Confirm	Q
12674-11-2	PCB-1016	0.023	0.33	0.33		U
11104-28-2	PCB-1221	0.096	0.33	0.33		U
11141-16-5	PCB-1232	0.063	0.33	0.33		U
53469-21-9	PCB-1242	0.040	0.33	0.33		U
12672-29-6	PCB-1248	0.047	0.33	0.33		U
11097-69-1	PCB-1254	0.025	0.33	0.33		U
11096-82-5	PCB-1260	0.025	0.33	0.33		U

Surrogate	% Rec.	QC Limits	Qualifier
Decachlorobiphenyl	91.5	25-143	

Comments:

RECEIVED
7-13-04

Attachment C

All sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at Building 84A UL#01 are on file at the CH2M HILL Office located at 155 Grand Avenue in Oakland, California. These files are available for U.S.EPA inspection.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Tom Sheaff, Project Director, Lennar Mare Island, LLC (the owner of the property where the cleanup site is located)

Jeffery C. Morris, P.E./CH2M HILL (the party conducting the cleanup)